

Serial No.: 09/766,677
Atty. Docket No.: P66217US0

IN THE SPECIFICATION:

For the purposes of line numbers referred to herein, lines of text as well as blank lines between paragraphs are counted. Accordingly, beginning the numbering with the first line of the text after the title, the second paragraph on page 1, for example, is designated herein as beginning at line 4 of the text as originally filed, the second full paragraph on page 2 begins at line 15 of the text as originally filed, and so on.

On page 1, please delete all of the text appearing before the title of the invention.

On page 1, before line 1 of the text and after the title, please insert the following headings:

--BACKGROUND OF THE INVENTION

1. FIELD OF THE INVENTION--

On page 1, line 3, please insert the following heading:
--2. DESCRIPTION OF THE RELATED ART--.

On page 2, please amend the first full paragraph which begins on line 8, as follows:

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--In electroosmotic processes, the speed of the quantities of matter to be moved depends on the channel width, as a rule. In addition, the channel must be completely filled, in principle. Also, high field strengths are required to transport of small quantities of liquid, which lead, in addition to undesired electrochemical and electrobiochemical effects, also to an unavoidable joule heating of the quantities of matter to be moved, which can, among other things, affect the functionality of the carrier material.--

On page 2, line 14, please insert the following heading:

--SUMMARY OF THE INVENTION--.

On page 2, please amend the fourth full paragraph, which begins on line 20, as follows:

--This task is accomplished by a process and device for specific and direct manipulation of small quantities of matter on solid-body surfaces in which, with the aid of one or more acoustic surface waves, an impulse is generated along the solid-body surface, with the surface wave being generated with a surface-wave generator. The impulse is made to interact with at

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least one quantity of matter in order to cause movement on the
surface in a desired direction with the characteristics of claim 1
and a device with the characteristics of claim 31. --

On page 3, please amend the second full paragraph which begins on line 26, as follows:

--Matter transport through impulse transfer from a surface wave permits high current and process speeds with comparatively small electric field strengths up to the speed of sound for surface waves on the corresponding substrate. Moreover, the process presented can be scaled over broad ranges, since the speed of the quantity of matter to be moved does not depend on the channel width, as it does, e.g., in the electroosmotic process. In contrast to, e.g., the electroosmotic transport process, no high field strengths are needed for transport that could possibly lead to undesired electrophysical or electrochemical reactions. The small quantities of matter to be transported are located, disregarding any of a high-frequency alternating field that may be present accompanying the surface wave, ~~are located~~ in a field-free space. Especially for biological systems, such as cells, damaging effects of high electric fields are thus avoided. The method of functioning of

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the pump mechanism is independent of the type and properties of a transport or buffer liquid that may be used. In addition, with the process according to the invention, ~~and~~ undesired joule heating is avoided.--

On page 16, line 12, insert the following heading,
--BRIEF DESCRIPTION OF THE DRAWINGS--.

On page 17, line 12, insert the following heading along with the paragraph following thereafter:

--DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Further scope of applicability of the present invention will become apparent from the detailed description given hereinafter. However, it should be understood that the detailed description and specific examples, while indicating preferred embodiments of the invention, are given by way of illustration only, since various changes and modifications within the spirit and scope of the invention will become apparent to those skilled in the art from this detailed description.--.

On page 28, after the last line, please insert the following paragraph:

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--The invention being thus described, it will be apparent that the same may be varied in many ways. Such variations are not to be regarded as a departure from the spirit and scope of the invention, and all such modifications as would be recognized by one skilled in the art are intended to be included within the scope of the following claims.--.